GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: November 17, 2003, 15:13:36 ; Search time 21 Seconds
(without alignments)
32.237 Million cell updates/sec

Title: US-09-897-465-10
Perfect score: 104
Sequence: 1 GCCSLPPCALNNPDYC 16

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_AA:*
1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	104	100.0	16	3	US-09-219-446B-10	Sequence 10, Appl
2	99	95.2	16	3	US-09-219-446B-9	Sequence 9, Appli
3	99	95.2	16	3	US-09-219-446B-12	Sequence 12, Appl
4	94	90.4	16	3	US-09-219-446B-11	Sequence 11, Appl
5	75	72.1	65	1	US-08-137-800-46	Sequence 46, Appl
6	75	72.1	65	1	US-08-477-383-46	Sequence 46, Appl
7	75	72.1	65	1	US-08-487-174-46	Sequence 46, Appl
8	75	72.1	65	1	US-08-480-750-46	Sequence 46, Appl
9	74	71.2	16	2	US-08-857-068-2	Sequence 2, Appli
10	74	71.2	16	3	US-09-219-446B-5	Sequence 5, Appli
11	74	71.2	17	3	US-09-219-446B-6	Sequence 6, Appli
12	67	64.4	16	2	US-08-857-068-4	Sequence 4, Appli
13	67	64.4	16	3	US-09-219-446B-8	Sequence 8, Appli
14	66	63.5	15	2	US-08-857-068-3	Sequence 3, Appli
15	65	62.5	65	3	US-09-488-799-95	Sequence 95, Appl
16	64	61.5	63	3	US-09-488-799-93	Sequence 93, Appl
17	64	61.5	63	3	US-09-488-799-99	Sequence 99, Appl
18	60	57.7	18	1	US-08-137-800-32	Sequence 32, Appl
19	60	57.7	18	1	US-08-477-383-32	Sequence 32, Appl
20	60	57.7	18	1	US-08-487-174-32	Sequence 32, Appl
21	60	57.7	18	1	US-08-480-750-32	Sequence 32, Appl
22	60	57.7	62	3	US-09-488-799-89	Sequence 89, Appl
23	59	56.7	63	3	US-09-488-799-97	Sequence 97, Appl
24	58	55.8	15	3	US-09-219-446B-7	Sequence 7, Appli
25	56	53.8	44	3	US-09-488-799-91	Sequence 91, Appl
26	56	53.8	62	3	US-09-488-799-101	Sequence 101, App
27	55	52.9	20	1	US-08-137-800-18	Sequence 18, Appl
28	55	52.9	20	1	US-08-477-383-18	Sequence 18, Appl
29	55	52.9	20	1	US-08-487-174-18	Sequence 18, Appl
30	55	52.9	20	1	US-08-480-750-18	Sequence 18, Appl
31	55	52.9	68	1	US-08-137-800-47	Sequence 47, Appl
32	55	52.9	68	1	US-08-477-383-47	Sequence 47, Appl
33	55	52.9	68	1	US-08-487-174-47	Sequence 47, Appl
34	55	52.9	68	1	US-08-480-750-47	Sequence 47, Appl
35	55	52.9	70	1	US-08-137-800-49	Sequence 49, Appl
36	55	52.9	70	1	US-08-477-383-49	Sequence 49, Appl
37	55	52.9	70	1	US-08-487-174-49	Sequence 49, Appl
38	55	52.9	70	1	US-08-480-750-49	Sequence 49, Appl
39	50	48.1	16	1	US-08-137-800-14	Sequence 14, Appl
40	50	48.1	16	1	US-08-477-383-14	Sequence 14, Appl
41	50	48.1	16	1	US-08-477-383-54	Sequence 54, Appl
42	50	48.1	16	1	US-08-487-174-14	Sequence 14, Appl
43	50	48.1	16	1	US-08-487-174-54	Sequence 54, Appl
44	50	48.1	16	1	US-08-480-750-14	Sequence 14, Appl
45	50	48.1	16	1	US-08-480-750-54	Sequence 54, Appl

ALIGNMENTS

RESULT 1
US-09-219-446B-10
; Sequence 10, Application US/09219446B
; Patent No. 6265541
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Yoshikami, Doju
; APPLICANT: Cartier, G. Edward
; APPLICANT: Luo, Siqin
; APPLICANT: University of Utah Research Foundation
; TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides
; FILE REFERENCE: Uses of Alpha-Conotoxins
; CURRENT APPLICATION NUMBER: US/09/219,446B
; CURRENT FILING DATE: 1998-12-23
; PRIOR APPLICATION NUMBER: US 60/080,588
; PRIOR FILING DATE: 1998-04-03
; PRIOR APPLICATION NUMBER: US 60/070,153
; PRIOR FILING DATE: 1997-12-31
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:A10L derivative
; OTHER INFORMATION: of C. purpurascens PnIA
US-09-219-446B-10

Query Match 100.0%; Score 104; DB 3; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.2e-06;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GCCSLPPCALNNPDYC 16
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Db 1 GCCSLPPCALNNPDYC 16

RESULT 2
US-09-219-446B-9
; Sequence 9, Application US/09219446B
; Patent No. 6265541
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Yoshikami, Doju
; APPLICANT: Cartier, G. Edward
; APPLICANT: Luo, Siqin
; APPLICANT: University of Utah Research Foundation

```
;  TITLE OF INVENTION:  Uses of Alpha-Conotoxin Peptides
;  FILE REFERENCE:  Uses of Alpha-Conotoxins
;  CURRENT APPLICATION NUMBER: US/09/219,446B
;  CURRENT FILING DATE:  1998-12-23
;  PRIOR APPLICATION NUMBER:  US 60/080,588
;  PRIOR FILING DATE:  1998-04-03
;  PRIOR APPLICATION NUMBER:  US 60/070,153
;  PRIOR FILING DATE:  1997-12-31
;  NUMBER OF SEQ ID NOS:  13
;  SOFTWARE:  PatentIn Ver. 2.0
; SEQ ID NO 9
;   LENGTH: 16
;   TYPE: PRT
;   ORGANISM: Conus purpurascens
US-09-219-446B-9

  Query Match             95.2%;  Score 99;  DB 3;  Length 16;
  Best Local Similarity   93.8%;  Pred. No. 4.7e-06;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
              |||||||||  ||||||
Db          1 GCCSLPPCAANNPDYC 16


RESULT 3
US-09-219-446B-12
; Sequence 12, Application US/09219446B
; Patent No. 6265541
; GENERAL INFORMATION:
;  APPLICANT:  Olivera, Baldomero M.
;  APPLICANT:  McIntosh, J. Michael
;  APPLICANT:  Yoshikami, Doju
;  APPLICANT:  Cartier, G. Edward
;  APPLICANT:  Luo, Siqin
;  APPLICANT:  University of Utah Research Foundation
;  TITLE OF INVENTION:  Uses of Alpha-Conotoxin Peptides
;  FILE REFERENCE:  Uses of Alpha-Conotoxins
;  CURRENT APPLICATION NUMBER: US/09/219,446B
;  CURRENT FILING DATE:  1998-12-23
;  PRIOR APPLICATION NUMBER:  US 60/080,588
;  PRIOR FILING DATE:  1998-04-03
;  PRIOR APPLICATION NUMBER:  US 60/070,153
;  PRIOR FILING DATE:  1997-12-31
;  NUMBER OF SEQ ID NOS:  13
;  SOFTWARE:  PatentIn Ver. 2.0
; SEQ ID NO 12
;   LENGTH: 16
;   TYPE: PRT
;   ORGANISM: Conus purpurascens
US-09-219-446B-12

  Query Match             95.2%;  Score 99;  DB 3;  Length 16;
  Best Local Similarity   93.8%;  Pred. No. 4.7e-06;
  Matches   15;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
              ||||||||||:|||||
Db          1 GCCSLPPCALSNPDYC 16


RESULT 4
US-09-219-446B-11
; Sequence 11, Application US/09219446B
; Patent No. 6265541
; GENERAL INFORMATION:
;  APPLICANT:  Olivera, Baldomero M.
;  APPLICANT:  McIntosh, J. Michael
;  APPLICANT:  Yoshikami, Doju
;  APPLICANT:  Cartier, G. Edward
;  APPLICANT:  Luo, Siqin
;  APPLICANT:  University of Utah Research Foundation
;  TITLE OF INVENTION:  Uses of Alpha-Conotoxin Peptides
;  FILE REFERENCE:  Uses of Alpha-Conotoxins
;  CURRENT APPLICATION NUMBER: US/09/219,446B
;  CURRENT FILING DATE:  1998-12-23
;  PRIOR APPLICATION NUMBER:  US 60/080,588
;  PRIOR FILING DATE:  1998-04-03
;  PRIOR APPLICATION NUMBER:  US 60/070,153
;  PRIOR FILING DATE:  1997-12-31
;  NUMBER OF SEQ ID NOS:  13
;  SOFTWARE:  PatentIn Ver. 2.0
; SEQ ID NO 11
;   LENGTH: 16
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:N11S derivative
;   OTHER INFORMATION: of C. purpurascens PnIA
US-09-219-446B-11

  Query Match             90.4%;  Score 94;  DB 3;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 1.8e-05;
  Matches   14;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
              |||||||||  :|||||
Db          1 GCCSLPPCAASNPDYC 16


RESULT 5
US-08-137-800-46
; Sequence 46, Application US/08137800
; Patent No. 5514774
;  GENERAL INFORMATION:
;    APPLICANT:  Olivera, Baldomero M.
;    APPLICANT:  Cruz, Lourdes J.
;    APPLICANT:  Hillyard, David R.
;    APPLICANT:  McIntosh, J. Michael
;    APPLICANT:  Santos, Ameurfina D.
;    TITLE OF INVENTION:  Conotoxin Peptides
;    NUMBER OF SEQUENCES:  53
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Venable, Baetjer, Howard & Civiletti
;      STREET:  1201 New York Avenue N.W., Suite 1000
;      CITY:  Washington
;      STATE:  DC
;      ZIP:  20005
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WordPerfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/137,800
;      FILING DATE:  19-OCT-1993
;      CLASSIFICATION:  530
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Ihnen, Jeffrey L.
;      REGISTRATION NUMBER:  28,957
;      REFERENCE/DOCKET NUMBER:  24260-104763
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-962-4810
;      TELEFAX:  202-962-8300
;  INFORMATION FOR SEQ ID NO:  46:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  65 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    ORIGINAL SOURCE:
;      ORGANISM:  Conus bandanus
US-08-137-800-46
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  Query Match             72.1%;  Score 75;  DB 1;  Length 65;
  Best Local Similarity   68.8%;  Pred. No. 0.012;
  Matches   11;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
              |||| | |::|||| |
Db         49 GCCSHPACSVNNPDIC 64


RESULT 6
US-08-477-383-46
; Sequence 46, Application US/08477383
; Patent No. 5589340
;  GENERAL INFORMATION:
;    APPLICANT:  Olivera, Baldomero M.
;    APPLICANT:  Cruz, Lourdes J.
;    APPLICANT:  Hillyard, David R.
;    APPLICANT:  Macintosh, J. Michael
;    APPLICANT:  Santos, Ameurfino S.
;    TITLE OF INVENTION:  Conotoxin Peptides
;    NUMBER OF SEQUENCES:  59
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Venable, Baetjer, Howard & Civiletti
;      STREET:  1201 New York Avenue, N.W., Suite 1000
;      CITY:  Washington
;      STATE:  DC
;      COUNTRY:  U.S.A.
;      ZIP:  20005
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/477,383
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/137,800
;      FILING DATE:  19-OCT-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/084,848
;      FILING DATE:  29-JUN-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Ihnen, Jeffrey L.
;      REGISTRATION NUMBER:  28,957
;      REFERENCE/DOCKET NUMBER:  24260-107673
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-962-4810
;      TELEFAX:  202-962-8300
;  INFORMATION FOR SEQ ID NO:  46:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  65 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    HYPOTHETICAL:  NO
;    ORIGINAL SOURCE:
;      ORGANISM:  Conus bandanus
US-08-477-383-46

  Query Match             72.1%;  Score 75;  DB 1;  Length 65;
  Best Local Similarity   68.8%;  Pred. No. 0.012;
  Matches   11;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
              |||| | |::|||| |
Db         49 GCCSHPACSVNNPDIC 64


RESULT 7
US-08-487-174-46
; Sequence 46, Application US/08487174
; Patent No. 5595972
;  GENERAL INFORMATION:
;    APPLICANT:  Olivera, Baldomero M.
;    APPLICANT:  Cruz, Lourdes J.
;    APPLICANT:  Hillyard, David R.
;    APPLICANT:  Macintosh, J. Michael
;    APPLICANT:  Santos, Ameurfino S.
;    TITLE OF INVENTION:  Conotoxin Peptides
;    NUMBER OF SEQUENCES:  59
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Venable, Baetjer, Howard & Civiletti
;      STREET:  1201 New York Avenue, N.W., Suite 1000
;      CITY:  Washington
;      STATE:  DC
;      COUNTRY:  U.S.A.
;      ZIP:  20005
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/487,174
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/137,800
;      FILING DATE:  19-OCT-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/084,848
;      FILING DATE:  29-JUN-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Ihnen, Jeffrey L.
;      REGISTRATION NUMBER:  28,957
;      REFERENCE/DOCKET NUMBER:  24260-107673
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-962-4810
;      TELEFAX:  202-962-8300
;  INFORMATION FOR SEQ ID NO:  46:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  65 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    HYPOTHETICAL:  NO
;    ORIGINAL SOURCE:
;      ORGANISM:  Conus bandanus
US-08-487-174-46

  Query Match             72.1%;  Score 75;  DB 1;  Length 65;
  Best Local Similarity   68.8%;  Pred. No. 0.012;
  Matches   11;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
              |||| | |::|||| |
Db         49 GCCSHPACSVNNPDIC 64


RESULT 8
US-08-480-750-46
; Sequence 46, Application US/08480750
; Patent No. 5633347
;  GENERAL INFORMATION:
;    APPLICANT:  Olivera, Baldomero M.
;    APPLICANT:  Cruz, Lourdes J.
;    APPLICANT:  Hillyard, David R.
;    APPLICANT:  Macintosh, J. Michael
;    APPLICANT:  Santos, Ameurfino S.
;    TITLE OF INVENTION:  Conotoxin Peptides
;    NUMBER OF SEQUENCES:  59
;    CORRESPONDENCE ADDRESS:
```

```
;      ADDRESSEE:  Venable, Baetjer, Howard & Civiletti
;      STREET:  1201 New York Avenue, N.W., Suite 1000
;      CITY:  Washington
;      STATE:  DC
;      COUNTRY:  U.S.A.
;      ZIP:  20005
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/480,750
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  530
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/137,800
;      FILING DATE:  19-OCT-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/084,848
;      FILING DATE:  29-JUN-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Ihnen, Jeffrey L.
;      REGISTRATION NUMBER:  28,957
;      REFERENCE/DOCKET NUMBER:  24260-107673
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-962-4810
;      TELEFAX:  202-962-8300
;  INFORMATION FOR SEQ ID NO:  46:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  65 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    HYPOTHETICAL:  NO
;    ORIGINAL SOURCE:
;      ORGANISM:  Conus bandanus
US-08-480-750-46

  Query Match             72.1%;  Score 75;  DB 1;  Length 65;
  Best Local Similarity   68.8%;  Pred. No. 0.012;
  Matches   11;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
              |||| | |::|||| |
Db         49 GCCSHPACSVNNPDIC 64


RESULT 9
US-08-857-068-2
; Sequence 2, Application US/08857068
; Patent No. 5866682
;  GENERAL INFORMATION:
;    APPLICANT:  McIntosh, J. Michael
;    APPLICANT:  Cartier, G. Edward
;    APPLICANT:  Yoshikami, Doju
;    APPLICANT:  Luo, Siqin
;    APPLICANT:  Olivera, Baldomero M.
;    TITLE OF INVENTION:  CONOPEPTIDES AuIA, AuIB AND AuIC
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Venable, Baetjer, Howard & Civiletti
;      STREET:  1201 New York Avenue, Suite 1000
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  US
;      ZIP:  20005
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/857,068
;      FILING DATE:
;      CLASSIFICATION:  530
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Ihnen, Jeffrey L.
;      REGISTRATION NUMBER:  28,957
;      REFERENCE/DOCKET NUMBER:  24260-121388
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-962-4810
;      TELEFAX:  202-962-8300
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  16 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
;    ORIGINAL SOURCE:
;      ORGANISM:  Conus aulicus
;    FEATURE:
;      NAME/KEY:  Disulfide-bond
;      LOCATION:  2..8
;    FEATURE:
;      NAME/KEY:  Disulfide-bond
;      LOCATION:  3..16
US-08-857-068-2

  Query Match             71.2%;  Score 74;  DB 2;  Length 16;
  Best Local Similarity   68.8%;  Pred. No. 0.0044;
  Matches   11;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
              |||| |||   | |||
Db          1 GCCSYPPCFATNSDYC 16


RESULT 10
US-09-219-446B-5
; Sequence 5, Application US/09219446B
; Patent No. 6265541
; GENERAL INFORMATION:
;  APPLICANT:  Olivera, Baldomero M.
;  APPLICANT:  McIntosh, J. Michael
;  APPLICANT:  Yoshikami, Doju
;  APPLICANT:  Cartier, G. Edward
;  APPLICANT:  Luo, Siqin
;  APPLICANT:  University of Utah Research Foundation
;  TITLE OF INVENTION:  Uses of Alpha-Conotoxin Peptides
;  FILE REFERENCE:  Uses of Alpha-Conotoxins
;  CURRENT APPLICATION NUMBER: US/09/219,446B
;  CURRENT FILING DATE:  1998-12-23
;  PRIOR APPLICATION NUMBER:  US 60/080,588
;  PRIOR FILING DATE:  1998-04-03
;  PRIOR APPLICATION NUMBER:  US 60/070,153
;  PRIOR FILING DATE:  1997-12-31
;  NUMBER OF SEQ ID NOS:  13
;  SOFTWARE:  PatentIn Ver. 2.0
; SEQ ID NO 5
;   LENGTH: 16
;   TYPE: PRT
;   ORGANISM: Conus aulicus
US-09-219-446B-5

  Query Match             71.2%;  Score 74;  DB 3;  Length 16;
  Best Local Similarity   68.8%;  Pred. No. 0.0044;
  Matches   11;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
              |||| |||   | |||
Db          1 GCCSYPPCFATNSDYC 16
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RESULT 11
US-09-219-446B-6
; Sequence 6, Application US/09219446B
; Patent No. 6265541
; GENERAL INFORMATION:
;  APPLICANT:  Olivera, Baldomero M.
;  APPLICANT:  McIntosh, J. Michael
;  APPLICANT:  Yoshikami, Doju
;  APPLICANT:  Cartier, G. Edward
;  APPLICANT:  Luo, Siqin
;  APPLICANT:  University of Utah Research Foundation
;  TITLE OF INVENTION:  Uses of Alpha-Conotoxin Peptides
;  FILE REFERENCE:  Uses of Alpha-Conotoxins
;  CURRENT APPLICATION NUMBER: US/09/219,446B
;  CURRENT FILING DATE:  1998-12-23
;  PRIOR APPLICATION NUMBER:  US 60/080,588
;  PRIOR FILING DATE:  1998-04-03
;  PRIOR APPLICATION NUMBER:  US 60/070,153
;  PRIOR FILING DATE:  1997-12-31
;  NUMBER OF SEQ ID NOS:  13
;  SOFTWARE:  PatentIn Ver. 2.0
; SEQ ID NO 6
;   LENGTH: 17
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Tyr derivative
;   OTHER INFORMATION: of C. aulicus AuIA
US-09-219-446B-6

  Query Match             71.2%;  Score 74;  DB 3;  Length 17;
  Best Local Similarity   68.8%;  Pred. No. 0.0047;
  Matches   11;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
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Db          2 GCCSYPPCFATNSDYC 17


RESULT 12
US-08-857-068-4
; Sequence 4, Application US/08857068
; Patent No. 5866682
;  GENERAL INFORMATION:
;    APPLICANT:  McIntosh, J. Michael
;    APPLICANT:  Cartier, G. Edward
;    APPLICANT:  Yoshikami, Doju
;    APPLICANT:  Luo, Siqin
;    APPLICANT:  Olivera, Baldomero M.
;    TITLE OF INVENTION:  CONOPEPTIDES AuIA, AuIB AND AuIC
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Venable, Baetjer, Howard & Civiletti
;      STREET:  1201 New York Avenue, Suite 1000
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  US
;      ZIP:  20005
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/857,068
;      FILING DATE:
;      CLASSIFICATION:  530
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Ihnen, Jeffrey L.
;      REGISTRATION NUMBER:  28,957
;      REFERENCE/DOCKET NUMBER:  24260-121388
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-962-4810
;      TELEFAX:  202-962-8300
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  16 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
;    ORIGINAL SOURCE:
;      ORGANISM:  Conus aulicus
;    FEATURE:
;      NAME/KEY:  Disulfide-bond
;      LOCATION:  2..8
;    FEATURE:
;      NAME/KEY:  Disulfide-bond
;      LOCATION:  3..16
US-08-857-068-4

  Query Match             64.4%;  Score 67;  DB 2;  Length 16;
  Best Local Similarity   62.5%;  Pred. No. 0.03;
  Matches   10;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
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Db          1 GCCSYPPCFATNSGYC 16


RESULT 13
US-09-219-446B-8
; Sequence 8, Application US/09219446B
; Patent No. 6265541
; GENERAL INFORMATION:
;  APPLICANT:  Olivera, Baldomero M.
;  APPLICANT:  McIntosh, J. Michael
;  APPLICANT:  Yoshikami, Doju
;  APPLICANT:  Cartier, G. Edward
;  APPLICANT:  Luo, Siqin
;  APPLICANT:  University of Utah Research Foundation
;  TITLE OF INVENTION:  Uses of Alpha-Conotoxin Peptides
;  FILE REFERENCE:  Uses of Alpha-Conotoxins
;  CURRENT APPLICATION NUMBER: US/09/219,446B
;  CURRENT FILING DATE:  1998-12-23
;  PRIOR APPLICATION NUMBER:  US 60/080,588
;  PRIOR FILING DATE:  1998-04-03
;  PRIOR APPLICATION NUMBER:  US 60/070,153
;  PRIOR FILING DATE:  1997-12-31
;  NUMBER OF SEQ ID NOS:  13
;  SOFTWARE:  PatentIn Ver. 2.0
; SEQ ID NO 8
;   LENGTH: 16
;   TYPE: PRT
;   ORGANISM: Conus aulicus
US-09-219-446B-8

  Query Match             64.4%;  Score 67;  DB 3;  Length 16;
  Best Local Similarity   62.5%;  Pred. No. 0.03;
  Matches   10;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
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Db          1 GCCSYPPCFATNSGYC 16


RESULT 14
US-08-857-068-3
; Sequence 3, Application US/08857068
; Patent No. 5866682
;  GENERAL INFORMATION:
;    APPLICANT:  McIntosh, J. Michael
;    APPLICANT:  Cartier, G. Edward
;    APPLICANT:  Yoshikami, Doju
;    APPLICANT:  Luo, Siqin
;    APPLICANT:  Olivera, Baldomero M.
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; TITLE OF INVENTION: CONOPEPTIDES AuIA, AuIB AND AuIC
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Venable, Baetjer, Howard & Civiletti
; STREET: 1201 New York Avenue, Suite 1000
; CITY: Washington
; STATE: D.C.
; COUNTRY: US
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/857,068
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Ihnen, Jeffrey L.
; REGISTRATION NUMBER: 28,957
; REFERENCE/DOCKET NUMBER: 24260-121388
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-962-4810
; TELEFAX: 202-962-8300
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Conus aulicus
; FEATURE:
; NAME/KEY: Disulfide-bond
; LOCATION: 2..8
; FEATURE:
; NAME/KEY: Disulfide-bond
; LOCATION: 3..15
US-08-857-068-3

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Best Local Similarity 71.4%; Pred. No. 0.037;
Matches 10; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

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Db          1 GCCSYPPCFATNPD 14
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RESULT 15
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; Sequence 95, Application US/09488799
; Patent No. 6268473
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Layer, Richard T.
; APPLICANT: Watkins, Maren
; APPLICANT: Hillyard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Schoenfeld, Robert
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: Alpha Conotoxin Peptides
; FILE REFERENCE: Alphas 1
; CURRENT APPLICATION NUMBER: US/09/488,799
; CURRENT FILING DATE: 2000-01-21
; EARLIER APPLICATION NUMBER: 60/116,881
; EARLIER FILING DATE: 1999-01-22
; EARLIER APPLICATION NUMBER: 60/116,882
; EARLIER FILING DATE: 1999-01-22
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 95
; LENGTH: 65
; TYPE: PRT
; ORGANISM: Conus sulcatus
US-09-488-799-95

Query Match 62.5%; Score 65; DB 3; Length 65;
Best Local Similarity 56.2%; Pred. No. 0.19;
Matches 9; Conservative 3; Mismatches 4; Indels 0; Gaps 0;

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Db         46 GCCSYPPCNVSYPEIC 61
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Job time : 22 secs

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: November 17, 2003, 15:19:01 ; Search time 29 Seconds
(without alignments)
100.722 Million cell updates/sec

Title: US-09-897-465-10
Perfect score: 104
Sequence: 1 GCCSLPPCALNNPDYC 16

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 666188 seqs, 182559486 residues

Total number of hits satisfying chosen parameters: 666188

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_AA:*
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18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	104	100.0	16	9	US-09-897-465-10	Sequence 10, Appl
2	99	95.2	16	9	US-09-897-465-9	Sequence 9, Appli
3	99	95.2	16	9	US-09-897-465-12	Sequence 12, Appl
4	94	90.4	16	9	US-09-897-465-11	Sequence 11, Appl
5	74	71.2	16	9	US-09-897-465-5	Sequence 5, Appli
6	74	71.2	17	9	US-09-897-465-6	Sequence 6, Appli
7	72	69.2	19	15	US-10-072-602B-604	Sequence 604, App
8	72	69.2	61	15	US-10-072-602B-406	Sequence 406, App
9	70	67.3	17	15	US-10-072-602B-618	Sequence 618, App
10	70	67.3	63	15	US-10-072-602B-446	Sequence 446, App
11	69.5	66.8	17	15	US-10-072-602B-615	Sequence 615, App
12	69.5	66.8	63	15	US-10-072-602B-437	Sequence 437, App
13	69	66.3	17	15	US-10-072-602B-609	Sequence 609, App
14	69	66.3	61	15	US-10-072-602B-419	Sequence 419, App
15	67	64.4	16	9	US-09-897-465-8	Sequence 8, Appli
16	67	64.4	16	15	US-10-072-602B-617	Sequence 617, App
17	67	64.4	57	15	US-10-072-602B-443	Sequence 443, App
18	65	62.5	17	15	US-10-072-602B-602	Sequence 602, App
19	65	62.5	17	15	US-10-072-602B-603	Sequence 603, App
20	65	62.5	65	11	US-09-908-741-95	Sequence 95, Appl
21	64	61.5	63	11	US-09-908-741-93	Sequence 93, Appl
22	64	61.5	63	11	US-09-908-741-99	Sequence 99, Appl
23	63	60.6	21	15	US-10-072-602B-611	Sequence 611, App
24	63	60.6	62	15	US-10-072-602B-425	Sequence 425, App
25	60	57.7	62	11	US-09-908-741-89	Sequence 89, Appl
26	59	56.7	63	11	US-09-908-741-97	Sequence 97, Appl
27	58	55.8	15	9	US-09-897-465-7	Sequence 7, Appli
28	58	55.8	15	15	US-10-072-602B-616	Sequence 616, App
29	58	55.8	17	15	US-10-072-602B-613	Sequence 613, App
30	58	55.8	57	15	US-10-072-602B-440	Sequence 440, App
31	58	55.8	58	15	US-10-072-602B-431	Sequence 431, App
32	56	53.8	44	11	US-09-908-741-91	Sequence 91, Appl
33	56	53.8	62	11	US-09-908-741-101	Sequence 101, App
34	55	52.9	20	15	US-10-072-602B-620	Sequence 620, App
35	55	52.9	63	15	US-10-072-602B-452	Sequence 452, App
36	54	51.9	14	15	US-10-072-602B-614	Sequence 614, App
37	54	51.9	17	15	US-10-072-602B-606	Sequence 606, App
38	54	51.9	19	15	US-10-072-602B-407	Sequence 407, App
39	54	51.9	58	15	US-10-072-602B-434	Sequence 434, App
40	54	51.9	64	15	US-10-072-602B-412	Sequence 412, App
41	53	51.0	169	15	US-10-156-761-14131	Sequence 14131, A
42	51	49.0	17	15	US-10-072-602B-610	Sequence 610, App
43	51	49.0	64	15	US-10-072-602B-422	Sequence 422, App
44	50	48.1	15	15	US-10-072-602B-607	Sequence 607, App
45	50	48.1	16	9	US-09-897-465-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1
US-09-897-465-10
; Sequence 10, Application US/09897465
; Patent No. US20020022715A1
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Yoshikami, Doju
; APPLICANT: Cartier, G. Edward
; APPLICANT: Luo, Siqin
; APPLICANT: University of Utah Research Foundation
; TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides
; FILE REFERENCE: Uses of Alpha-Conotoxins
; CURRENT APPLICATION NUMBER: US/09/897,465
; CURRENT FILING DATE: 2001-07-03
; PRIOR APPLICATION NUMBER: US 60/080,588
; PRIOR FILING DATE: 1998-04-03
; PRIOR APPLICATION NUMBER: US 60/070,153
; PRIOR FILING DATE: 1997-12-31
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:A10L derivative
; OTHER INFORMATION: of C. purpurascens PnIA
US-09-897-465-10

Query Match 100.0%; Score 104; DB 9; Length 16;
Best Local Similarity 100.0%; Pred. No. 2.9e-07;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GCCSLPPCALNNPDYC 16
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Db 1 GCCSLPPCALNNPDYC 16

RESULT 2
US-09-897-465-9
; Sequence 9, Application US/09897465
; Patent No. US20020022715A1
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Yoshikami, Doju
; APPLICANT: Cartier, G. Edward
; APPLICANT: Luo, Siqin
; APPLICANT: University of Utah Research Foundation
; TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides
; FILE REFERENCE: Uses of Alpha-Conotoxins
; CURRENT APPLICATION NUMBER: US/09/897,465
; CURRENT FILING DATE: 2001-07-03
; PRIOR APPLICATION NUMBER: US 60/080,588
; PRIOR FILING DATE: 1998-04-03
; PRIOR APPLICATION NUMBER: US 60/070,153
; PRIOR FILING DATE: 1997-12-31
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 9
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Conus purpurascens
US-09-897-465-9

Query Match 95.2%; Score 99; DB 9; Length 16;
Best Local Similarity 93.8%; Pred. No. 1.3e-06;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GCCSLPPCALNNPDYC 16
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Db 1 GCCSLPPCAANNPDYC 16

RESULT 3
US-09-897-465-12
; Sequence 12, Application US/09897465
; Patent No. US20020022715A1
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Yoshikami, Doju
; APPLICANT: Cartier, G. Edward
; APPLICANT: Luo, Siqin
; APPLICANT: University of Utah Research Foundation
; TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides
; FILE REFERENCE: Uses of Alpha-Conotoxins
; CURRENT APPLICATION NUMBER: US/09/897,465
; CURRENT FILING DATE: 2001-07-03
; PRIOR APPLICATION NUMBER: US 60/080,588
; PRIOR FILING DATE: 1998-04-03
; PRIOR APPLICATION NUMBER: US 60/070,153
; PRIOR FILING DATE: 1997-12-31
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Conus purpurascens
US-09-897-465-12

Query Match 95.2%; Score 99; DB 9; Length 16;
Best Local Similarity 93.8%; Pred. No. 1.3e-06;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GCCSLPPCALNNPDYC 16
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Db 1 GCCSLPPCALSNPDYC 16

RESULT 4
US-09-897-465-11
; Sequence 11, Application US/09897465
; Patent No. US20020022715A1
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Yoshikami, Doju
; APPLICANT: Cartier, G. Edward
; APPLICANT: Luo, Siqin
; APPLICANT: University of Utah Research Foundation
; TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides
; FILE REFERENCE: Uses of Alpha-Conotoxins
; CURRENT APPLICATION NUMBER: US/09/897,465
; CURRENT FILING DATE: 2001-07-03
; PRIOR APPLICATION NUMBER: US 60/080,588
; PRIOR FILING DATE: 1998-04-03
; PRIOR APPLICATION NUMBER: US 60/070,153
; PRIOR FILING DATE: 1997-12-31
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:N11S derivative
; OTHER INFORMATION: of C. purpurascens PnIA
US-09-897-465-11

Query Match 90.4%; Score 94; DB 9; Length 16;
Best Local Similarity 87.5%; Pred. No. 5.8e-06;
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GCCSLPPCALNNPDYC 16
||||||||| :|||||
Db 1 GCCSLPPCAASNPDYC 16

RESULT 5
US-09-897-465-5
; Sequence 5, Application US/09897465
; Patent No. US20020022715A1
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Yoshikami, Doju
; APPLICANT: Cartier, G. Edward
; APPLICANT: Luo, Siqin
; APPLICANT: University of Utah Research Foundation
; TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides
; FILE REFERENCE: Uses of Alpha-Conotoxins
; CURRENT APPLICATION NUMBER: US/09/897,465
; CURRENT FILING DATE: 2001-07-03
; PRIOR APPLICATION NUMBER: US 60/080,588
; PRIOR FILING DATE: 1998-04-03
; PRIOR APPLICATION NUMBER: US 60/070,153
; PRIOR FILING DATE: 1997-12-31
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Conus aulicus
US-09-897-465-5

Query Match 71.2%; Score 74; DB 9; Length 16;
Best Local Similarity 68.8%; Pred. No. 0.0024;
Matches 11; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 1 GCCSLPPCALNNPDYC 16
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Db 1 GCCSYPPCFATNSDYC 16

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RESULT 6
US-09-897-465-6
; Sequence 6, Application US/09897465
; Patent No. US20020022715A1
; GENERAL INFORMATION:
;  APPLICANT: Olivera, Baldomero M.
;  APPLICANT:  McIntosh, J. Michael
;  APPLICANT:  Yoshikami, Doju
;  APPLICANT:  Cartier, G. Edward
;  APPLICANT:  Luo, Siqin
;  APPLICANT:  University of Utah Research Foundation
;  TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides
;  FILE REFERENCE: Uses of Alpha-Conotoxins
;  CURRENT APPLICATION NUMBER: US/09/897,465
;  CURRENT FILING DATE:  2001-07-03
;  PRIOR APPLICATION NUMBER: US 60/080,588
;  PRIOR FILING DATE: 1998-04-03
;  PRIOR APPLICATION NUMBER: US 60/070,153
;  PRIOR FILING DATE: 1997-12-31
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
;   LENGTH: 17
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Tyr derivative
;   OTHER INFORMATION: of C. aulicus AuIA
US-09-897-465-6

  Query Match             71.2%;  Score 74;  DB 9;  Length 17;
  Best Local Similarity   68.8%;  Pred. No. 0.0025;
  Matches   11;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
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Db          2 GCCSYPPCFATNSDYC 17


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; Sequence 604, Application US/10072602B
; Publication No. US20030109670A1
; GENERAL INFORMATION:
;  APPLICANT: University of Utah Research Foundation
;  APPLICANT:  Cognetix, Inc.
;  APPLICANT:  Olivera, Baldomero M.
;  APPLICANT:  McIntosh, J, Michael
;  APPLICANT:  Watkins, Maren
;  APPLICANT:  Garrett, James E.
;  APPLICANT:  Cruz, Lourdes J.
;  APPLICANT:  Grilley, Michelle
;  APPLICANT:  Schoenfeld, Robert M.
;  APPLICANT:  Walker, Craig
;  APPLICANT:  Shetty, Reshma
;  APPLICANT:  Jones, Robert M.
;  TITLE OF INVENTION: Cone Snail Peptides
;  FILE REFERENCE: 2314-249
;  CURRENT APPLICATION NUMBER: US/10/072,602B
;  CURRENT FILING DATE:  2002-02-11
;  PRIOR APPLICATION NUMBER: US 60/267,408
;  PRIOR FILING DATE: 2001-02-09
;  NUMBER OF SEQ ID NOS: 638
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 604
;   LENGTH: 19
;   TYPE: PRT
;   ORGANISM: Conus quercinus
US-10-072-602B-604

  Query Match             69.2%;  Score 72;  DB 15;  Length 19;
  Best Local Similarity   68.8%;  Pred. No. 0.0051;
  Matches   11;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
              |||| | ||::||| |
Db          2 GCCSDPACAVSNPDIC 17


RESULT 8
US-10-072-602B-406
; Sequence 406, Application US/10072602B
; Publication No. US20030109670A1
; GENERAL INFORMATION:
;  APPLICANT: University of Utah Research Foundation
;  APPLICANT:  Cognetix, Inc.
;  APPLICANT:  Olivera, Baldomero M.
;  APPLICANT:  McIntosh, J, Michael
;  APPLICANT:  Watkins, Maren
;  APPLICANT:  Garrett, James E.
;  APPLICANT:  Cruz, Lourdes J.
;  APPLICANT:  Grilley, Michelle
;  APPLICANT:  Schoenfeld, Robert M.
;  APPLICANT:  Walker, Craig
;  APPLICANT:  Shetty, Reshma
;  APPLICANT:  Jones, Robert M.
;  TITLE OF INVENTION: Cone Snail Peptides
;  FILE REFERENCE: 2314-249
;  CURRENT APPLICATION NUMBER: US/10/072,602B
;  CURRENT FILING DATE:  2002-02-11
;  PRIOR APPLICATION NUMBER: US 60/267,408
;  PRIOR FILING DATE: 2001-02-09
;  NUMBER OF SEQ ID NOS: 638
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 406
;   LENGTH: 61
;   TYPE: PRT
;   ORGANISM: Conus quercinus
US-10-072-602B-406

  Query Match             69.2%;  Score 72;  DB 15;  Length 61;
  Best Local Similarity   68.8%;  Pred. No. 0.015;
  Matches   11;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 GCCSLPPCALNNPDYC 16
              |||| | ||::||| |
Db         42 GCCSDPACAVSNPDIC 57


RESULT 9
US-10-072-602B-618
; Sequence 618, Application US/10072602B
; Publication No. US20030109670A1
; GENERAL INFORMATION:
;  APPLICANT: University of Utah Research Foundation
;  APPLICANT:  Cognetix, Inc.
;  APPLICANT:  Olivera, Baldomero M.
;  APPLICANT:  McIntosh, J, Michael
;  APPLICANT:  Watkins, Maren
;  APPLICANT:  Garrett, James E.
;  APPLICANT:  Cruz, Lourdes J.
;  APPLICANT:  Grilley, Michelle
;  APPLICANT:  Schoenfeld, Robert M.
;  APPLICANT:  Walker, Craig
;  APPLICANT:  Shetty, Reshma
;  APPLICANT:  Jones, Robert M.
;  TITLE OF INVENTION: Cone Snail Peptides
;  FILE REFERENCE: 2314-249
;  CURRENT APPLICATION NUMBER: US/10/072,602B
;  CURRENT FILING DATE:  2002-02-11
;  PRIOR APPLICATION NUMBER: US 60/267,408
;  PRIOR FILING DATE: 2001-02-09
;  NUMBER OF SEQ ID NOS: 638
;  SOFTWARE: PatentIn version 3.0
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; SEQ ID NO 618
; LENGTH: 17
; TYPE: PRT
; ORGANISM: Conus generalis
US-10-072-602B-618

Query Match 67.3%; Score 70; DB 15; Length 17;
Best Local Similarity 68.8%; Pred. No. 0.0083;
Matches 11; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 1 GCCSLPPCALNNPDYC 16
||||.|||..||..||
Db 1 GCCSNPPCYANNQAYC 16

RESULT 10
US-10-072-602B-446
; Sequence 446, Application US/10072602B
; Publication No. US20030109670A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J, Michael
; APPLICANT: Watkins, Maren
; APPLICANT: Garrett, James E.
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Grilley, Michelle
; APPLICANT: Schoenfeld, Robert M.
; APPLICANT: Walker, Craig
; APPLICANT: Shetty, Reshma
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: Cone Snail Peptides
; FILE REFERENCE: 2314-249
; CURRENT APPLICATION NUMBER: US/10/072,602B
; CURRENT FILING DATE: 2002-02-11
; PRIOR APPLICATION NUMBER: US 60/267,408
; PRIOR FILING DATE: 2001-02-09
; NUMBER OF SEQ ID NOS: 638
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 446
; LENGTH: 63
; TYPE: PRT
; ORGANISM: Conus generalis
US-10-072-602B-446

Query Match 67.3%; Score 70; DB 15; Length 63;
Best Local Similarity 68.8%; Pred. No. 0.028;
Matches 11; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 1 GCCSLPPCALNNPDYC 16
||||.|||..||..||
Db 44 GCCSNPPCYANNQAYC 59

RESULT 11
US-10-072-602B-615
; Sequence 615, Application US/10072602B
; Publication No. US20030109670A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J, Michael
; APPLICANT: Watkins, Maren
; APPLICANT: Garrett, James E.
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Grilley, Michelle
; APPLICANT: Schoenfeld, Robert M.
; APPLICANT: Walker, Craig
; APPLICANT: Shetty, Reshma
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: Cone Snail Peptides
; FILE REFERENCE: 2314-249
; CURRENT APPLICATION NUMBER: US/10/072,602B
; CURRENT FILING DATE: 2002-02-11
; PRIOR APPLICATION NUMBER: US 60/267,408
; PRIOR FILING DATE: 2001-02-09
; NUMBER OF SEQ ID NOS: 638
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 615
; LENGTH: 17
; TYPE: PRT
; ORGANISM: Conus cinereus gubba
US-10-072-602B-615

Query Match 66.8%; Score 69.5; DB 15; Length 17;
Best Local Similarity 68.8%; Pred. No. 0.0097;
Matches 11; Conservative 1; Mismatches 3; Indels 1; Gaps 1;

Qy 1 GCCSLPPCALNNPDYC 16
||||.|||..|||.:|
Db 2 GCCSFPPCIANNP-FC 16

RESULT 12
US-10-072-602B-437
; Sequence 437, Application US/10072602B
; Publication No. US20030109670A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J, Michael
; APPLICANT: Watkins, Maren
; APPLICANT: Garrett, James E.
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Grilley, Michelle
; APPLICANT: Schoenfeld, Robert M.
; APPLICANT: Walker, Craig
; APPLICANT: Shetty, Reshma
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: Cone Snail Peptides
; FILE REFERENCE: 2314-249
; CURRENT APPLICATION NUMBER: US/10/072,602B
; CURRENT FILING DATE: 2002-02-11
; PRIOR APPLICATION NUMBER: US 60/267,408
; PRIOR FILING DATE: 2001-02-09
; NUMBER OF SEQ ID NOS: 638
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 437
; LENGTH: 63
; TYPE: PRT
; ORGANISM: Conus cinereus gubba
US-10-072-602B-437

Query Match 66.8%; Score 69.5; DB 15; Length 63;
Best Local Similarity 68.8%; Pred. No. 0.033;
Matches 11; Conservative 1; Mismatches 3; Indels 1; Gaps 1;

Qy 1 GCCSLPPCALNNPDYC 16
||||.|||..|||.:|
Db 45 GCCSFPPCIANNP-FC 59

RESULT 13
US-10-072-602B-609
; Sequence 609, Application US/10072602B
; Publication No. US20030109670A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J, Michael
; APPLICANT: Watkins, Maren
; APPLICANT: Garrett, James E.

; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Grilley, Michelle
; APPLICANT: Schoenfeld, Robert M.
; APPLICANT: Walker, Craig
; APPLICANT: Shetty, Reshma
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: Cone Snail Peptides
; FILE REFERENCE: 2314-249
; CURRENT APPLICATION NUMBER: US/10/072,602B
; CURRENT FILING DATE: 2002-02-11
; PRIOR APPLICATION NUMBER: US 60/267,408
; PRIOR FILING DATE: 2001-02-09
; NUMBER OF SEQ ID NOS: 638
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 609
; LENGTH: 17
; TYPE: PRT
; ORGANISM: Conus nobilis
US-10-072-602B-609

Query Match 66.3%; Score 69; DB 15; Length 17;
Best Local Similarity 62.5%; Pred. No. 0.011;
Matches 10; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

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Qy          1 GCCSLPPCALNNPDYC 16
              ||| |||   ||| |
Db          1 GCCERPPCRWQNPDLC 16
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RESULT 14
US-10-072-602B-419
; Sequence 419, Application US/10072602B
; Publication No. US20030109670A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J, Michael
; APPLICANT: Watkins, Maren
; APPLICANT: Garrett, James E.
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Grilley, Michelle
; APPLICANT: Schoenfeld, Robert M.
; APPLICANT: Walker, Craig
; APPLICANT: Shetty, Reshma
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: Cone Snail Peptides
; FILE REFERENCE: 2314-249
; CURRENT APPLICATION NUMBER: US/10/072,602B
; CURRENT FILING DATE: 2002-02-11
; PRIOR APPLICATION NUMBER: US 60/267,408
; PRIOR FILING DATE: 2001-02-09
; NUMBER OF SEQ ID NOS: 638
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 419
; LENGTH: 61
; TYPE: PRT
; ORGANISM: Conus nobilis
US-10-072-602B-419

Query Match 66.3%; Score 69; DB 15; Length 61;
Best Local Similarity 62.5%; Pred. No. 0.037;
Matches 10; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

```
Qy          1 GCCSLPPCALNNPDYC 16
              ||| |||   ||| |
Db         42 GCCERPPCRWQNPDLC 57
```

RESULT 15
US-09-897-465-8
; Sequence 8, Application US/09897465
; Patent No. US20020022715A1
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Yoshikami, Doju
; APPLICANT: Cartier, G. Edward
; APPLICANT: Luo, Siqin
; APPLICANT: University of Utah Research Foundation
; TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides
; FILE REFERENCE: Uses of Alpha-Conotoxins
; CURRENT APPLICATION NUMBER: US/09/897,465
; CURRENT FILING DATE: 2001-07-03
; PRIOR APPLICATION NUMBER: US 60/080,588
; PRIOR FILING DATE: 1998-04-03
; PRIOR APPLICATION NUMBER: US 60/070,153
; PRIOR FILING DATE: 1997-12-31
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 8
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Conus aulicus
US-09-897-465-8

Query Match 64.4%; Score 67; DB 9; Length 16;
Best Local Similarity 62.5%; Pred. No. 0.019;
Matches 10; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

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Qy          1 GCCSLPPCALNNPDYC 16
              |||| |||   |  ||
Db          1 GCCSYPPCFATNSGYC 16
```

Search completed: November 17, 2003, 15:26:05
Job time : 29 secs